

# UNITED STATES PATENT OFFICE.

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## SURGICAL NEEDLE.

SPECIFICATION forming part of Letters Patent No. 527,263, dated October 9, 1894.

Application filed January 23, 1894. Serial No. 497,772. (No model.)

### *To all whom it may concern:*

Be it known that I, HELEN A. BLANCHARD, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Surgical Needles, of which the following is a specification.

This invention has for its object to provide a surgical needle adapted to introduce a thread or wire into the human skin with the minimum degree of pain to the patient.

The invention consists in a surgical needle comprising a lancet point and a blade having a notch, the rear side of which is formed to engage a thread when the needle is being inserted, while the forward side is formed to release the thread when the needle is being withdrawn, the construction being substantially as hereinafter described and claimed.

The lancet point is adapted to readily enter the skin and form an incision for the thread, so that the latter enters the skin with the minimum resistance and discomfort to the patient, while the form of the notch enables the needle to be readily disconnected from the thread by simply withdrawing it from the skin.

Of the accompanying drawings forming a part of this specification, Figure 1 represents a side view of one form of surgical needle embodying my invention. Fig. 2 represents a side view, and Fig. 3 an edge view, showing a somewhat different form of needle provided with my improvement. Figs. 4 and 5 represent enlargements of the form shown in Figs. 2 and 3. Fig. 6 represents a section on line 6, 6 of Fig. 4. Figs. 7 to 12, inclusive, represent views of various forms of needles embodying my invention.

The same letters and figures of reference indicate the same parts in all of the views.

In the drawings, *a* represents the blade, and *b* the lancet point of my improved surgical needle. The blade may be of any suitable form and may be abruptly curved, as shown in Fig. 1, or slightly curved, as shown in Fig. 2, or straight, or provided with the double curve shown in Fig. 12. The butt end of the blade, shank or handle has flattened sides *a'* *a'* forming bearings for the thumb and finger of the operator. The point *b* has the usual characteristics of a lancet, it being provided with a sharp point 2 and with cutting

edges 3, 4, said edges being formed by the intersection of the sides 5, 5, which sides are approximately flat, so that the point is quite thin. The sides of the lancet taper gradually from the point 2 to the body of the blade *a*, as shown in Figs. 3 and 5. This gradual taper of the sides, together with the thinness of the point and its cutting edges, enables it to readily penetrate human flesh with the minimum degree of pain.

The blade *a* is provided immediately at the rear of the lancet with a notch composed of an inclined side 7 and a side 8, which is substantially at right angles with the length of the blade. The side 8 of the notch forms a thread-engaging shoulder which is adapted to carry the thread along with the needle when the needle is moved forward, while the inclined side of the notch enables the notch to readily release the thread when the needle is withdrawn. It will be seen therefore, that much less pain is caused by the insertion of a thread or a fine wire into the flesh by a needle formed as described above, than by one which has an eye through which the thread or wire is passed.

The lancet-shaped point is wider than that portion of the blade which contains the notch, so that said point forms an orifice by a gradual and easy cutting action, which is of sufficient size to accommodate the blade and the thread, without causing undue pain or irritation.

It is obvious that the lancet point may be made in a variety of forms, as shown in the drawings.

I claim—

A surgical needle having its penetrating portion formed as a lancet of greater width than the adjoining portion of the blade, said blade having a thread-engaging notch, one side of which is substantially at a right angle to the blade, and the other side inclined therefrom toward the point.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 15th day of January, A. D. 1894.

HELEN A. BLANCHARD.

Witnesses:

C. F. BROWN,

A. D. HARRISON.